SONY

3-858-030-12 (1)

LCD Data Projector

Operating Instructions EN

VPL-V500Q
VPL-V500QM

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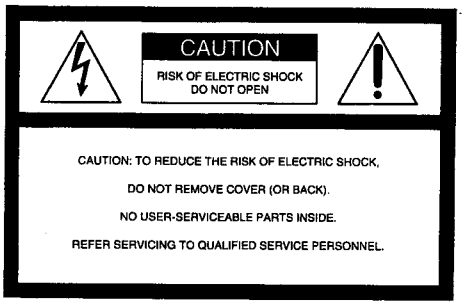
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of suffcient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference wll not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

This wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earch symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet or set the MAIN POWER switch to OFF if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-500 Projector Suspension Support must be used for installation.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 10 cm (4 inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

Caution

The projector is equipped with ventilation holes (intake) at the bottom and ventilation holes (exhaust) on the rear. Do not block these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

High brightness, high picture quality

• High brightness
Adopting the long service life metal halide lamp and new developed optical system allow high brightness (light output 500 ANSI lumen) and excellent uniformity on the picture.

• High resolution
By using three 1.3 inch-VGA panels, this projector offers resolution of 640 × 480 pixels for RGB input and 500 horizontal TV lines for composite video input.

• Superior color reproduction
The superior characteristics of the metal halide lamp and the optical design of the projector allow superior color reproduction.

Easy presentation

• Remote Commander with mouse control function
The Remote Commander can control a mouse for a computer connected to the mouse receiver.

• High portability
This projector comes with convenient features for transportation such as a carrying handle and a Remote Commander pocket on the cabinet to keep the Remote Commander.

Easy setup

• Easy setup with external equipment
This projector has 12 kinds of preset data for input signals. You can get an optimum picture by simply connecting an equipment with supplied cable.

• Flexible setup
This projector is designed to be installed on the table or the ceiling. A 1.6x zoom lens is provided as standard equipment.

Accepts various input signals

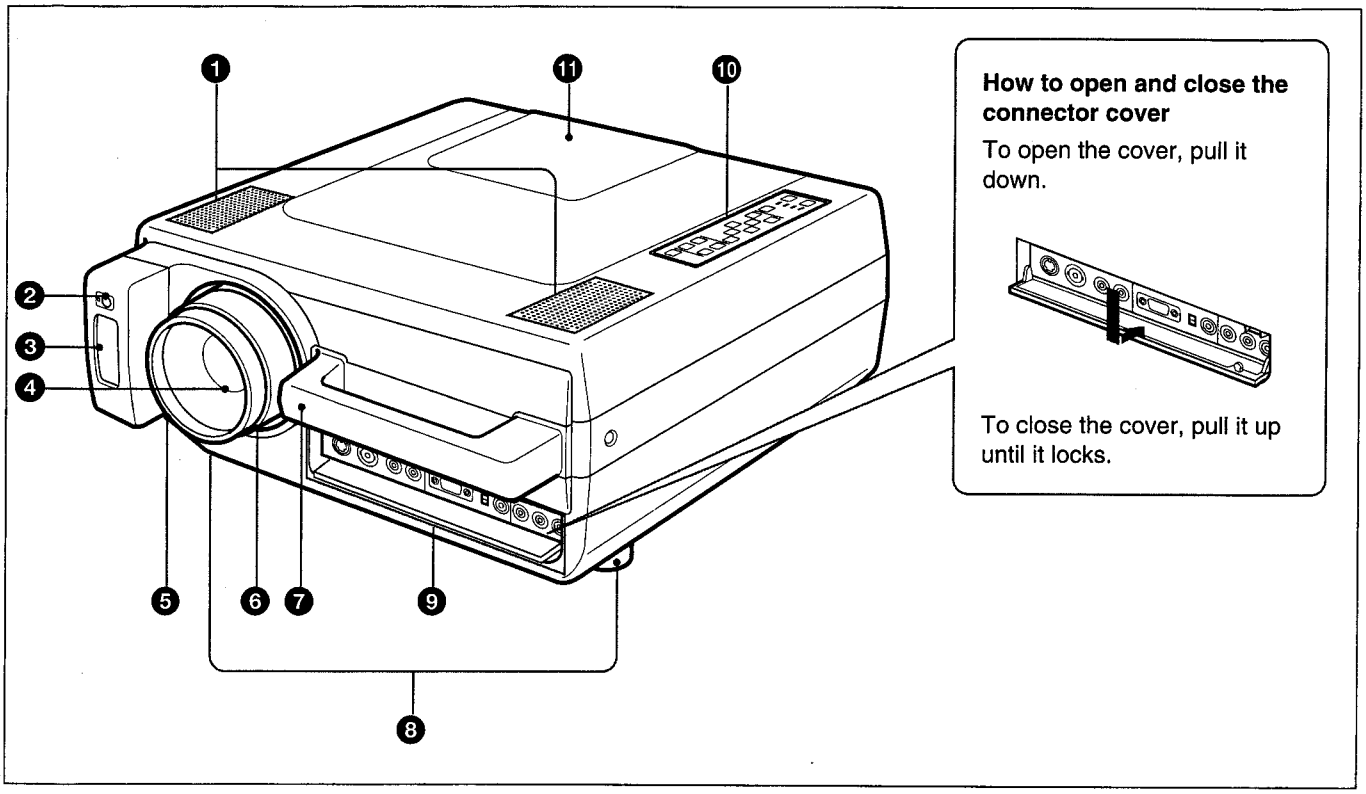
This projector accepts horizontal frequencies of 15, 24 to 40 kHz and vertical frequencies of 50 to 75 Hz. You can project pictures from VGA[1)] or S VGA[2)] computers, VCRs, and video cameras.

• Compatible with five color systems
NTSC, PAL, SECAM, NTSC 4.43[3)], or PAL-M color system can be selected automatically or manually.

1) VGA is a registered trademark of the International Business Machines Corporation, U.S.A.
2) S VGA is a registered trademark of the International Business Machines Corporation, U.S.A. Compressed S VGA signal is reproduced.
3) NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

Location and Function of Controls

Front



1 Speakers

2 Front remote control detector

3 Remote Commander pocket
Houses the supplied Remote Commander. When inserting the Remote Commander, make sure the infrared transmitter is facing forwards and push it until it clicks.
To take out the Remote Commander from the pocket, push it once and pull it out.

4 Lens
Remove the lens cap before projection.

5 Focus ring
Adjusts the picture focus.

6 Zoom ring
Adjusts the size of the picture.

7 Carrying handle
Use the handle for carrying the projector.

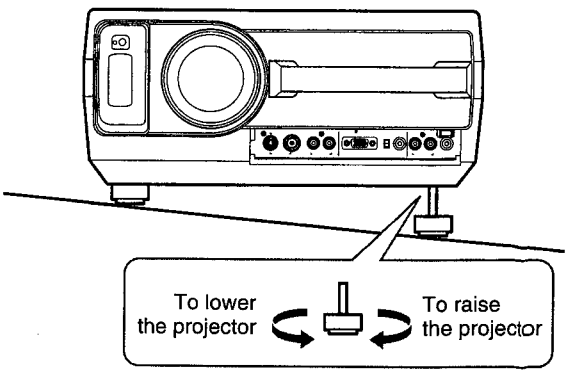
8 Adjusters
Use the adjusters to keep the projector level if it is installed on an uneven surface.

9 Connector panel
For details, see page 9.

10 Control panel
For details, see page 8.

11 Lamp cover

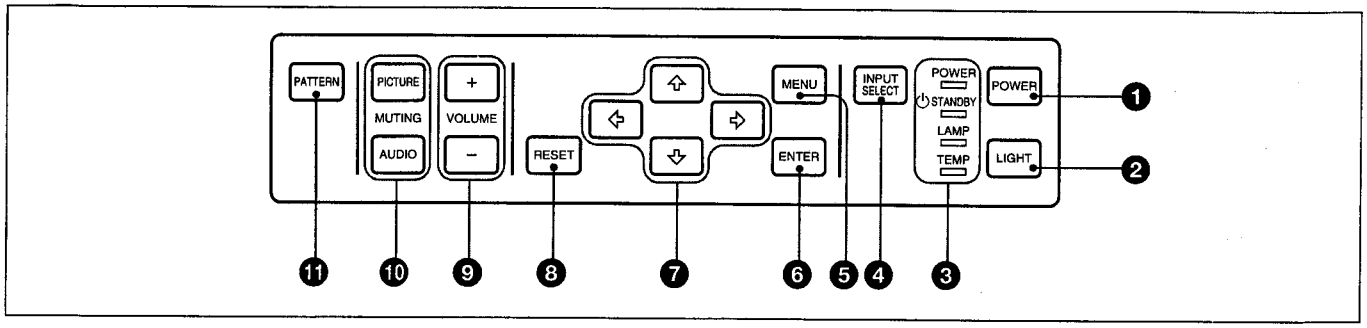
How to use the adjusters



While lifting the projector, turn the adjusters and adjust the height so that the projector becomes level.

Note
Be careful not to let the projector down on your fingers.

Control panel



❶ POWER key

Press to turn the projector on and off once the projector is in the standby mode. The POWER indicator lights in green when the power is turned on. **When turnig off the power, press and hold the POWER key for about one second.**

❷ LIGHT key

Lights the back lighting (orange) for the control panel when the power is turned on. Press again to turn off the back lighting.

❸ Indicators

POWER: Lights in green when the power is turned on.
Flashes in green while the cooling fan runs after turning off the power with the POWER key. The fan runs for about 10 minutes after turning off the power.
You will not be able to turn the power back on for the first minute that the POWER indicator is flashing.

STANDBY: Lights in red when the MAIN POWER switch at the rear of the projector is turned on. Once in the standby mode, you can turn the projector on and off with the POWER key on the control panel or the Remote Commander.

Note

When the MAIN POWER switch is turned off, there will be a slight delay before the indicator goes off.

LAMP: Lights up or flashes under the following conditions:

- Lights up when a trouble has prevented the lamp from lighting.
- Flashes when the lamp cover or air filter cover is not secured firmly.

Note

When the LAMP indicator lights up, never open the lamp cover if the projector is installed on the ceiling.

TEMP (Temperature): Lights up or flahes under the following conditions:

- Lights up when temperature inside the projector becomes unusually high.
- Flashes when the fan inside the projector stops.

For details on the LAMP and the TEMP indicators, see page 32.

❹ INPUT SELECT key

Selects the input signal. Each time the key is pressed, the video signal is switched between the VIDEO IN and INPUT A connectors and audio signal is switched between the AUDIO IN L/R and INPUT A connectors.

❺ MENU key

Press to display the on-screen menu. Press again to clear the menu.

❻ ENTER key

Press to enter the settings of items in the menu system.

❼ Arrow keys (↑/↓/←/→)

Used to move the on-screen cursor or to make various adjustments.

❽ RESET key

Press to restore the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

❾ VOLUME +/– keys

Adjust the volume of the built-in speakers and output level of the AUDIO OUT connectors.

+ : Increases the volume.
– : Decreases the volume.

❿ MUTING keys

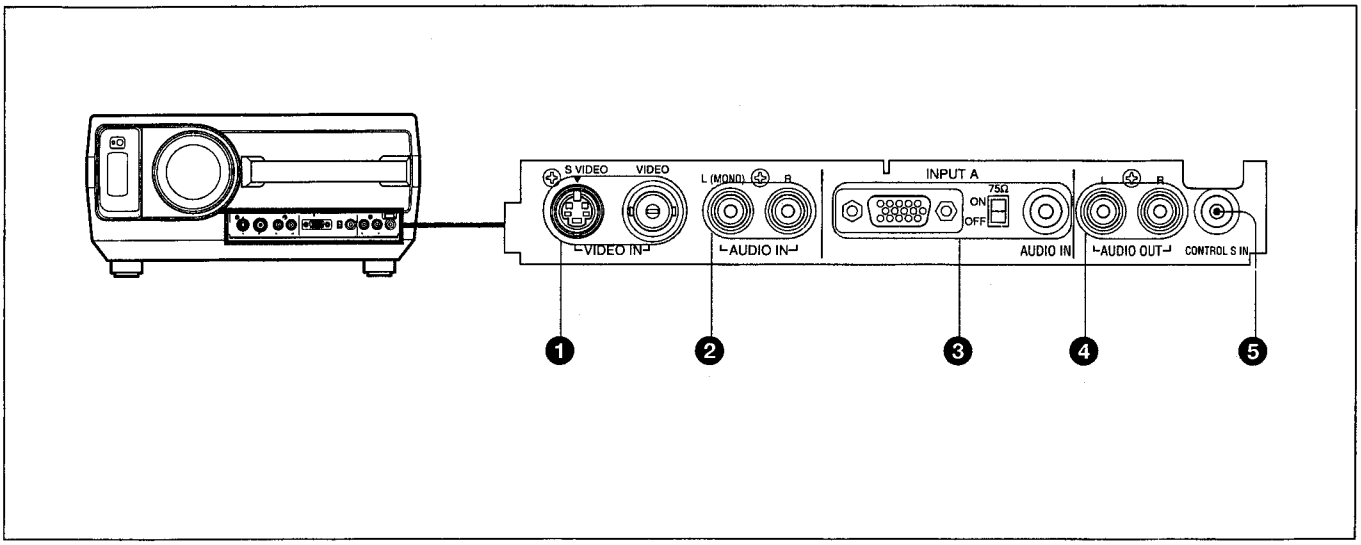
Cuts off the picture and sound.

PICTURE: Press to cut off the picture. Press again to restore the picture.
AUDIO: Press to cut off the sound. Press again or press the VOLUME + key to restore the sound.

⓫ PATTERN key

Display a pattern on the screen for focus adjustment. Press again to clear the pattern.

Connector panel



❶ VIDEO IN connectors

S VIDEO (mini DIN 4-pin): Connects to the S video output (Y/C video output) of a video equipment.

VIDEO (BNC-type): Connects to the composite video output of video equipment.

Note

If you have video equipments connected to both the S VIDEO and VIDEO connectors, the signal from the S VIDEO is selected. When showing video connected to the VIDEO connector, be sure not to connect a cable to the S VIDEO connector.

❷ AUDIO IN L (MONO)/R jacks (phono type)

Connect to the audio output jacks of an equipment. For stereo equipment, use both the L and R jacks; for monaural equipment, use the L (MONO) jack only.

❸ INPUT A connectors

RGB input connector (HD D-sub 15-pin, female): Connect to the monitor output connector on a computer using the supplied cable. Use the optional cable to input a component signal.

75-ohm termination switch (ON/OFF): Normally set to ON. Set it to OFF when the projector is connected to a computer and a monitor.

AUDIO IN jacks (stereo minijack): Connects to the audio output jack on a computer.

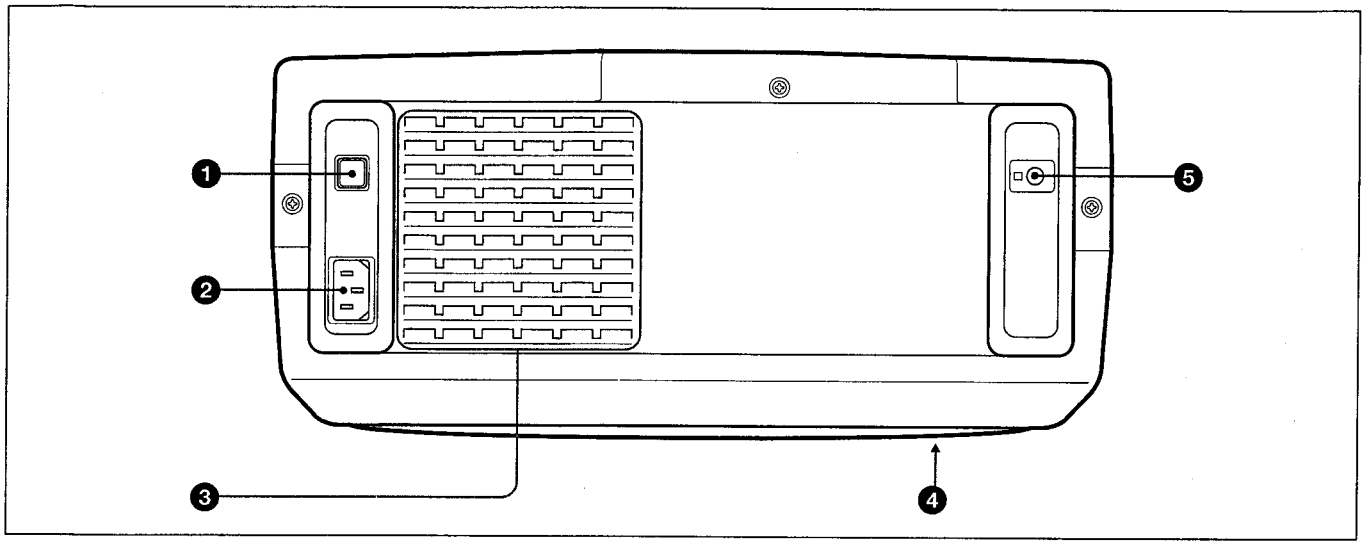
❹ AUDIO OUT L/R jacks (phono type)

Connects to external active speakers.
The volume of the speakers can be controlled by the VOLUME keys on the projector or the Remote Commander.

❺ CONTROL S IN/PLUG IN POWER (DC 5V) jack (stereo minijack)

Connects to the CONTROL S OUT jack of the supplied Remote Commander when using as a wired Remote Commander.

Rear



1 MAIN POWER switch (▬ON/■OFF)
Turns the main power on and off.

2 AC IN socket
Connect the supplied AC Power cord.

Note
If the supplied AC power cord plug does not match the wall socket in your country, consult qualified Sony personnel.

3 Ventilation holes (exhaust)

4 Ventilation holes (intake)

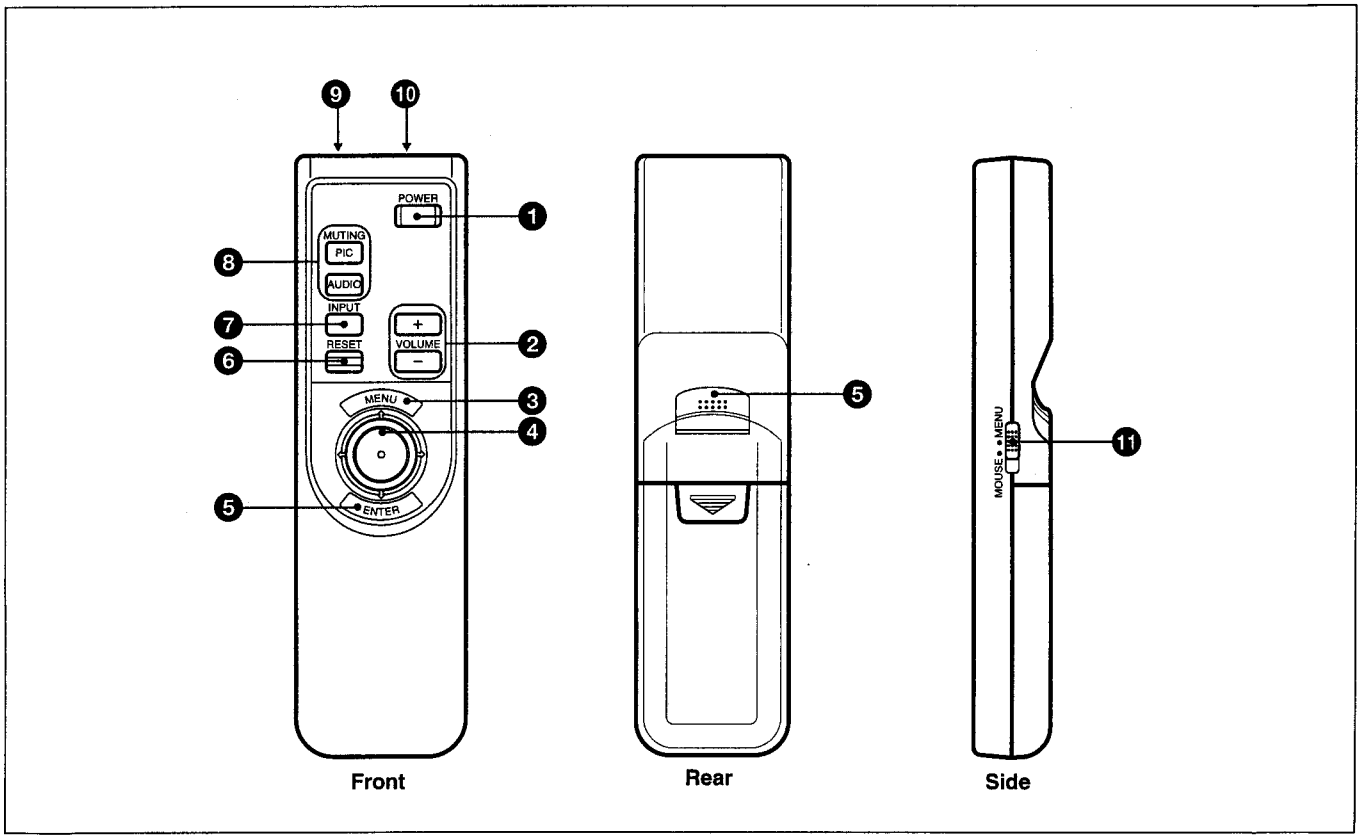
5 Rear remote control detector

Notes
- Do not place anything near the ventilation holes as it may cause internal heat build-up.
- Do not place your hand or objects near the ventilation holes – the air coming out is hot.

Remote Commander

The Remote Commander may be used as a wireless or wired Remote Commander.
For details on operation of the keys not mentioned here, see the description in the control panel section.

If you connect the mouse receiver to a computer, you can use the Remote Commander as a mouse for a connected computer.
For details, see "Operating a Computer from the Remote Commander" on page 15.



❶ POWER key

❷ VOLUME +/– keys

❸ MENU key

❹ Joy stick
Used to move the on-screen cursor or to make various adjustments.

❺ ENTER keys

❻ RESET key

❼ INPUT key

❽ MUTING PIC/AUDIO keys
The MUTING PIC key has the same function as the MUTING PICTURE key on the control panel.

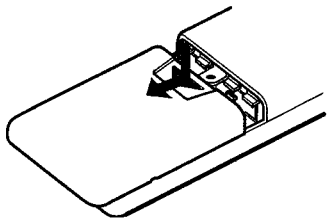
❾ CONTROL S OUT connector (stereo minijack)
Connect to the CONTROL S IN connector on the projector when using the Remote Commander as a wired Remote Commander. In this case, you don't need to install the batteries since the power is supplied from the CONTROL S IN jack on the projector.

❿ Infrared transmitter

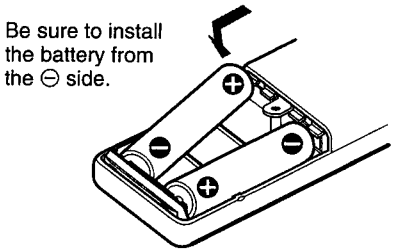
⓫ MOUSE/MENU switch
Normally, set to MENU.
Set to MOUSE when you operate the mouse on a computer connected to the mouse receiver from the Remote Commander.
For details, see "Operating a Computer from the Remote Commander" on page 15.

Battery installation

1 Push and slide to open the lid.



2 Install the two size AA (R6) batteries (supplied) with the correct polarity.



3 Replace the lid.

Notes on batteries

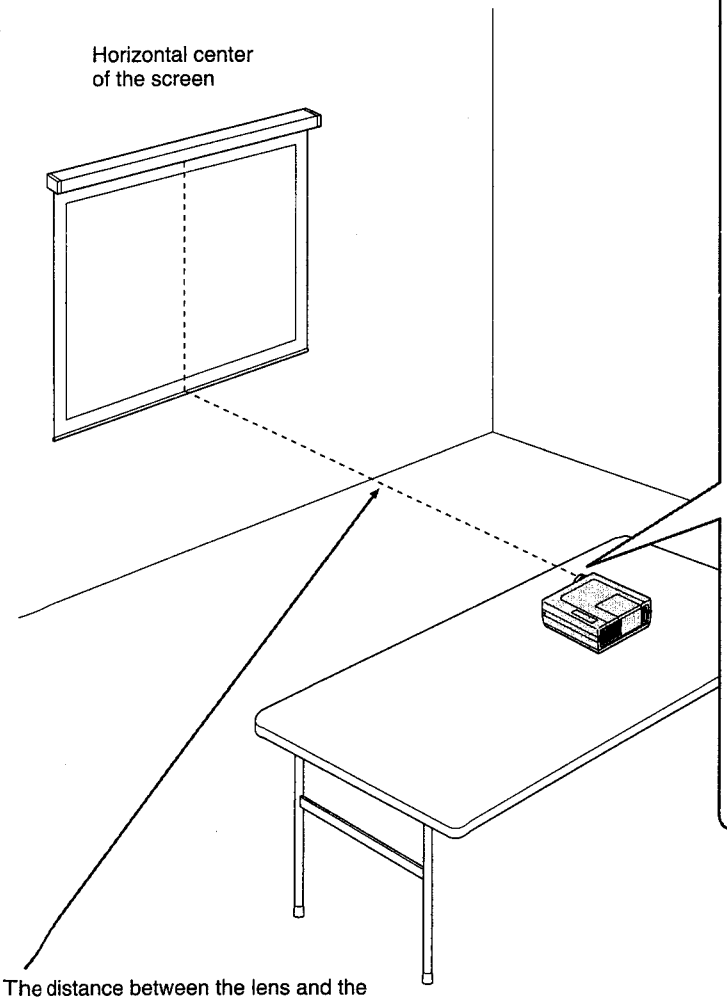
- Be careful that the battery orientation is correct when inserting batteries.
- Do not mix old battery with new one, or different types of batteries.
- If you do not intend to use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If a battery has leaked, remove the batteries, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless Remote Commander operation

- Be sure that there is nothing to obstruct the infrared beam between the Remote Commander and the projector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector, the wider the angle within which the commander can control the projector.
- The remote control detectors on the projector do not operate when the Remote Commander is being used as a wired Remote Commander. If you wish to use the Remote Commander as a wireless Remote Commander, be sure to remove the connecting cable from both the Remote Commander and the projector.

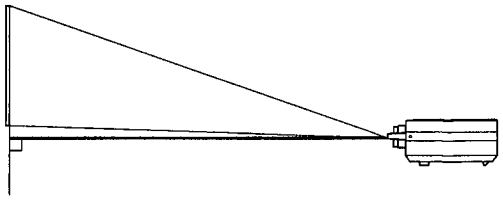
Installing the Projector

This section describes the installation arrangements for installing the projector on a table. For ceiling installation, consult with qualified Sony personnel (see page 29).



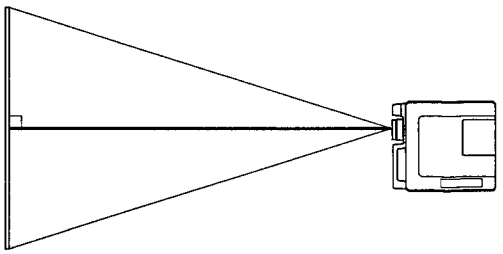
Adjust the vertical and horizontal positioning of the projector.

Vertical positioning (side view)



Adjust the height of the projector so that the center of the lens is just below the bottom edge of the screen.

Horizontal positioning (top view)



Adjust the horizontal positioning of the projector so that the lens is aligned with the horizontal center of the screen.

The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.

Unit: m (feet)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
Distance	Minimum	1.5 (4.9)	2.3 (7.5)	3.1 (10.1)	3.9 (12.7)	4.7 (15.4)	5.9 (19.3)	7.1 (23.2)	7.9 (25.8)	9.9 (32.3)	11.9 (38.9)
	Maximum	2.3 (7.7)	3.5 (11.5)	4.7 (15.5)	5.9 (19.3)	7.1 (23.3)	8.9 (29.3)	10.7 (35.1)	11.9 (39.2)	15.0 (49.0)	18.0 (58.9)

For detailed information on installation measurements, see page 28.

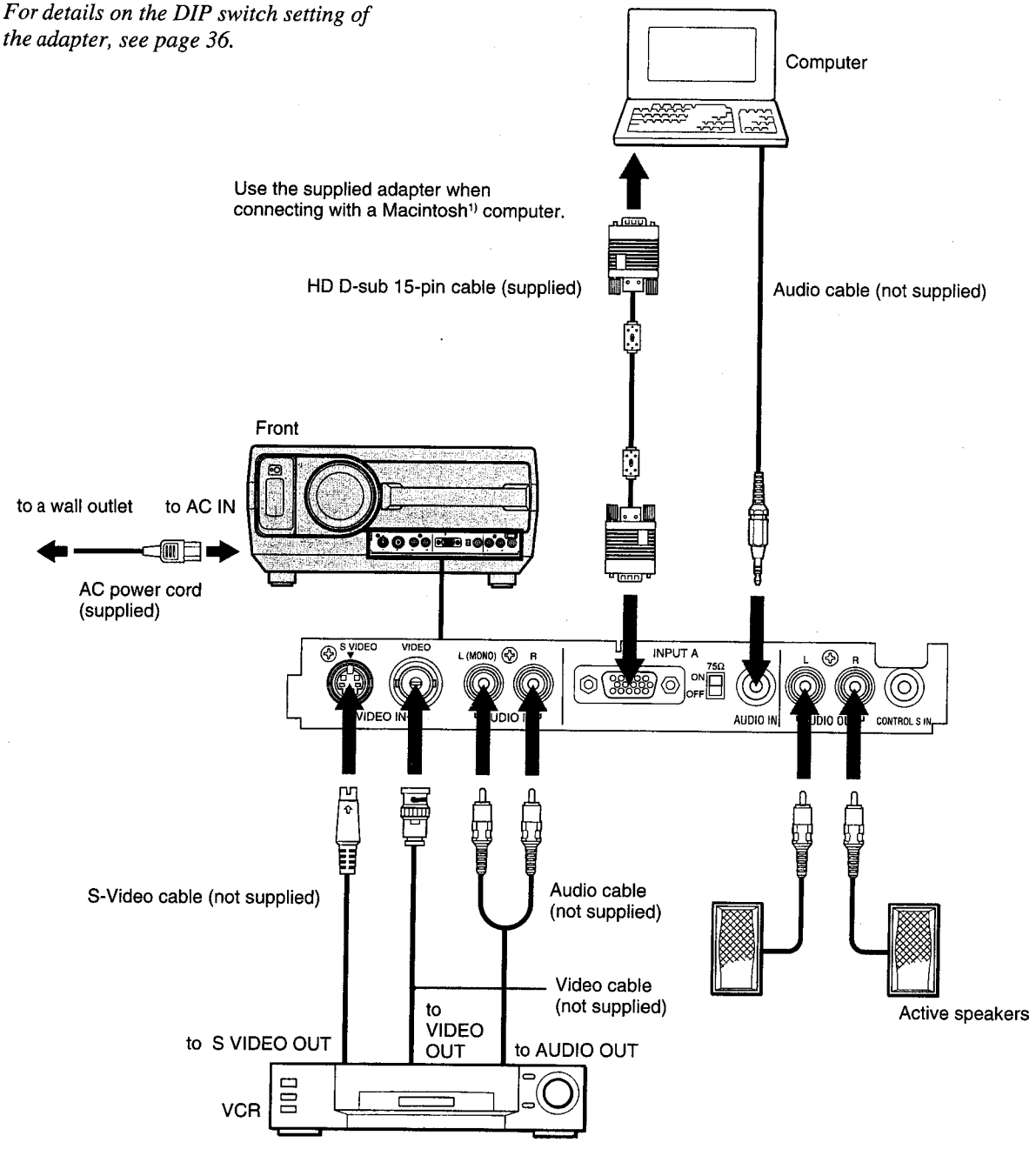
Connecting with a Computer or a VCR

This section describes how to connect the projector with a computer or a VCR and external active speakers. For details on how to connect other equipment, see page 30.
Also refer to the instruction manuals of the equipment to be connected.

When making connections, be sure to:

- turn off all equipment before making any connections.
- use the proper cables for each connection.
- insert the plugs of the cables properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

For details on the DIP switch setting of the adapter, see page 36.



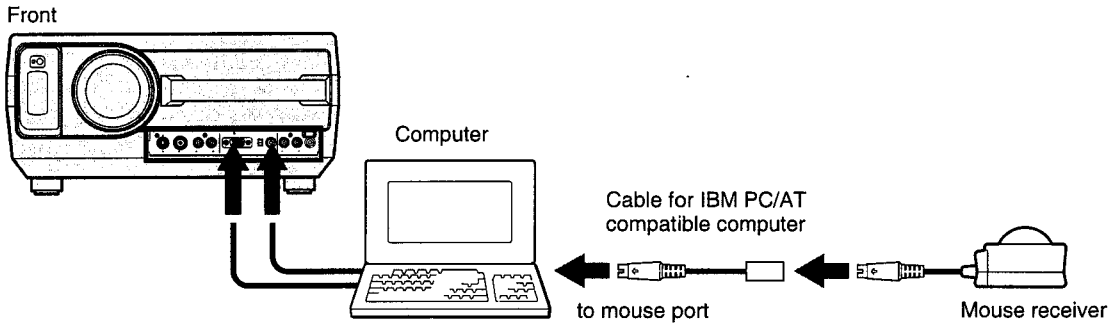
1) Macintosh is a registered trademark of Apple Computer, Inc.

Operating a Computer from the Remote Commander

If you connect the supplied mouse receiver to the mouse port of a computer, you can operate the mouse function of a computer with the Remote Commander.
Set the MOUSE/MENU switch to MOUSE when you operate a computer connected to the mouse receiver from the Remote Commander.
When the MENU/MOUSE switch is set to MOUSE, the MENU, ENTER keys and joy stick on the Remote Commander function as follows.

Key and joy stick	Function	
	IBM PC/AT[1] compatible, NEC	**Macintosh**
MENU	Left button	Mouse button
ENTER (front)	Right button	Mouse button
ENTER (rear)	Right button	Mouse button
Joy stick	Corresponds with the movements of the mouse	

When using an IBM PC/AT compatible computer
For details, see the supplied RM-PJ20 operating instructions.



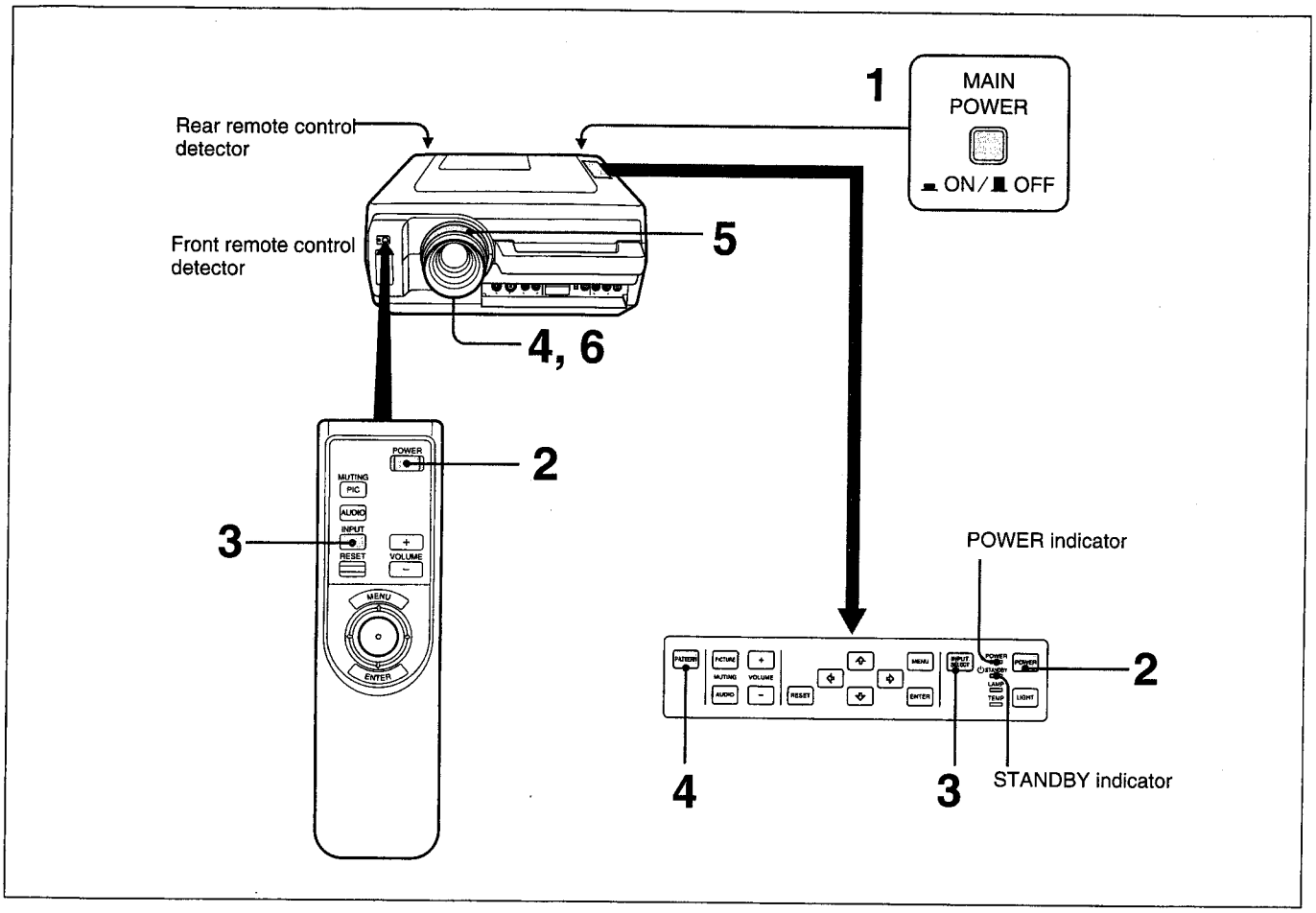
Use the supplied conversion cable when you connect to the IBM PC/AT compatible or Macintosh computer.

Computer	NEC	IBM PC/AT compatible	Macintosh
Conversion cable	—	Cable for IBM (for PC/AT compatible computer, PS/2 type) (6-pin←→9-pin)	Cable for Macintosh (4-pin←→9-pin)

Note
Be sure that their is nothing to obstruct the infrared beam between the Remote Commander and the mouse receiver.

1) IBM PC/AT is a registered trademark of International Business Machines Corporation, USA.

Projecting



1 Press the MAIN POWER switch on the rear of the projector (ON).

The STANDBY indicator lights in red and the projector goes into the standby mode.

2 Press the POWER key on the Remote Commander or the control panel.

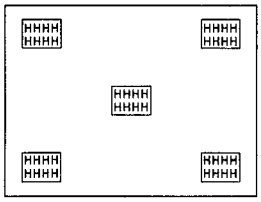
The POWER indicator lights in green.

3 Switch on equipment connected to the projector. Press the INPUT SELECT key on the control panel or the INPUT key on the Remote Commander to select the input source.

INPUT A: Selects audio and video signals input from the INPUT A connectors.

VIDEO: Selects signal input from the VIDEO IN and AUDIO IN L/R connectors.
(If you have made connections to both the S VIDEO and the VIDEO connectors, the signal from the S VIDEO connector is selected.)

4 Press the PATTERN key on the control panel to display the "H" test pattern, and turn the focus ring to adjust the focus.



Press the PATTERN key again to clear the pattern.

5 Turn the zoom ring to adjust the size of the picture.

6 Turn the focus ring again to adjust the focus.

Note

Do not look into the lens when the projector lamp is on.

To	Press
Adjust the volume	the VOLUME +/– keys.
Cut off the sound	the AUDIO MUTING key. To restore the sound, press the AUDIO MUTING key again or press the VOLUME + key.
Cut off the picture	the PICTURE MUTING key (PIC MUTING key on the Remote Commander). To restore the picture, press the PICTURE MUTING key again.

To turn off the power

1 Press and hold the POWER key on the control panel or the Remote Commander **for about one second.**

The power indicator flashes in green and the fan continues to run for about 10 minutes to reduce the internal heat. You will not be able to turn the power back on for the first minute that the power indicator is flashing. After about one minute, you can turn on the power with the POWER key.

2 Wait until the fan stops running and the STANDBY indicator lights in red; then press the MAIN POWER switch to turn off the main power (■ OFF).

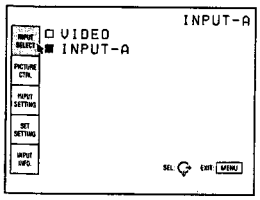
Notes

- **Do not to press the MAIN POWER switch while the fan is still running; the fan will stop while the lamp is still hot, leading to breakdown.**
- **To make the lamp life last longer, do not turn off the power at least for about 10 minutes after turning on the power.**

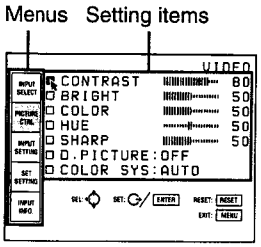
Using the MENU

The projector is equipped with an on-screen menu for making various adjustments and settings.
To select the language used in the menu, see page 25.

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.



2 Use the ↑ or ↓ keys on the control panel to select a menu, then press the → or the ENTER key. On the Remote Commander, move the joy stick up or down to select a menu, then move it to the right or press the ENTER key.
The selected menu appears.



3 Make setting or adjustment on an item.
For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key. The menu display disappears automatically if no key is pressed for one minute.

To reset items that have been adjusted

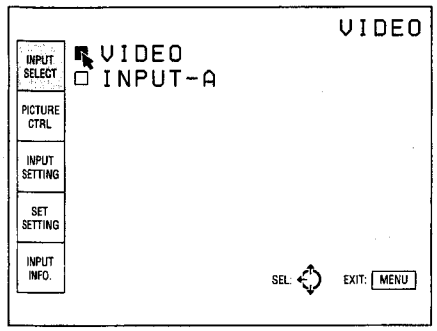
Press the RESET key. "Reset complete!" appears on the screen and the settings appearing on the screen will be reset to their factory preset values.

About the memory of the settings

The settings other than the INPUT SETTING menu are automatically stored in the projector memory. Adjustments made in the INPUT SETTING menu have to be saved with the SAVE TO MEMORY item in the INPUT SETTING menu.

The INPUT SELECT Menu

The INPUT SELECT menu is used for selecting the input signal.

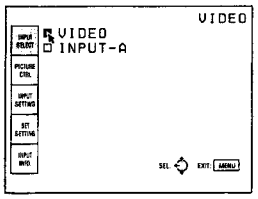


Operation

Use the ↑ or the ↓ key on the control panel to select the input, then press ← key.
On the Remote Commander, move the joy stick up or down to select the input, then move it to the left.

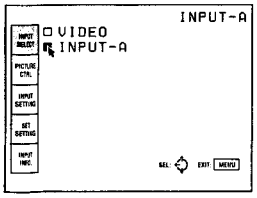
VIDEO

Selects signal input from the VIDEO IN (S VIDEO or VIDEO) connectors and the AUDIO IN L/R connectors. If you have equipment connected to both the VIDEO and the S VIDEO connectors, the S VIDEO will be selected.



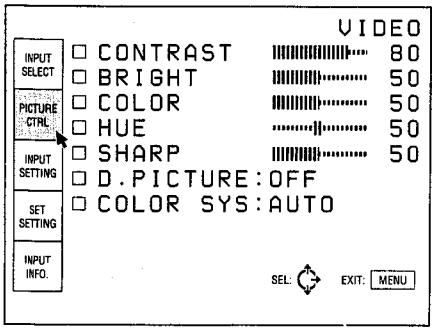
INPUT-A

Selects the audio and video signals input from the INPUT A connectors.



The PICTURE CTRL Menu

The PICTURE CTRL menu is used for adjusting the picture. Items which can be adjusted are displayed in green.



Operation

1. Select an item

Use the ↑ or the ↓ key on the control panel to select the item, then press the → or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.

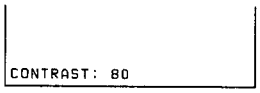
2. Adjust an item

- When changing the adjustment level:
  To increase the number, press the ↑ or the → key.
  On the Remote Commander, move the joy stick up or to the right.
  To decrease the number, press the ↓ or the ← key.
  On the Remote Commander, move the joy stick down or to the left.
  Press the ENTER key to restore the original screen.

- When changing the setting:
  Press the ↑ or the ↓ key on the control panel to change the setting.
  On the Remote Commander, move the joy stick up or down to change the setting.
  To restore the original screen, press the ENTER or the ← key.
  On the Remote Commander, move the joy stick to the left.

CONTRAST

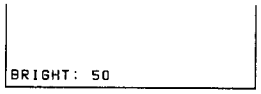
Adjusts the picture contrast.



The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

BRIGHT

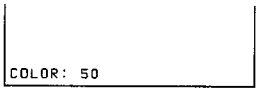
Adjusts the picture brightness.



The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

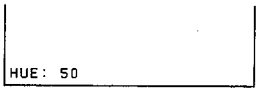
Adjusts color intensity.



The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

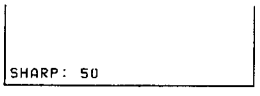
Adjusts skin tones.



A higher the setting, the picture becomes greenish.
A lower the setting, the picture becomes purplish.

SHARP

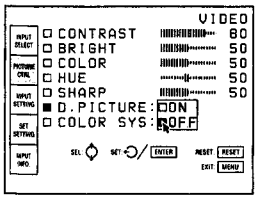
Adjusts the picture sharpness.



The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

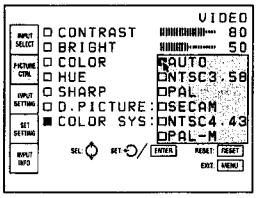
Emphasizes the black color.



ON: Emphasizes the black color to produce a bolder "dynamic" picture.
OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

COLOR SYS (System)

Selects the color system of the input signal.



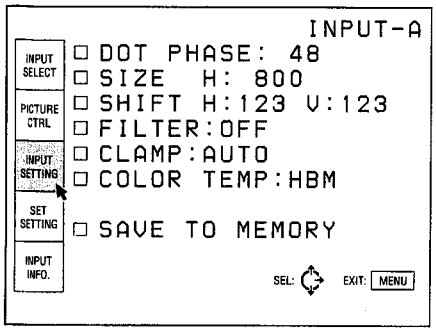
Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

Items cannot be adjusted depending on the types of input signal

Item	Cannot be adjusted with
COLOR	Signal input from INPUT A connectors, black-and-white signal
HUE	Input signal other than NTSC 3.58/4.43
SHARP	RGB signal
D. PICTURE	RGB signal
COLOR SYS	Signal input from INPUT A connectors.

The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal. Items which can be adjusted are displayed in green.



For details on initial setting signals, see page 38.

Operation

1. Select an item

Use the ↑ or ↓ key on the control panel to select the item, then press the → or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.

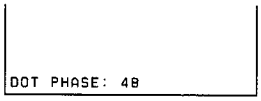
2. Adjust an item

- When changing the adjustment level:
  To increase the number, press the ↑ or the → key.
  On the Remote Commander, move the joy stick up or to the right.
  To decrease the number, press the ↓ or the ← key.
  On the Remote Commander, move the joy stick down or to the left.
  Press the ENTER key to restore the original screen.

- When changing the setting:
  Press the ↑ or the ↓ key to change the setting.
  On the Remote Commander, move the joy stick up or down to change the setting.
  To restore the original screen, press the ENTER or the ← key.
  On the Remote Commander, move the joy stick to the left.

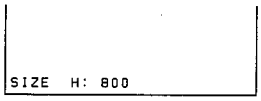
DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from INPUT A.



SIZE

Adjusts the horizontal size of pictures input from INPUT A.

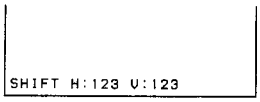


The higher the setting, the larger the horizontal size of the picture.
The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the horizontal dots of the input signal.

Input signal	Setting
VGA	800
Macintosh13-inch mode	864
15k RGB	800
VESA[1] 72 Hz (640×480 dots)	832
S VGA VESA 56 Hz	819
S VGA VESA 60 Hz	844

SHIFT

Adjusts the position of the picture input from INPUT A.

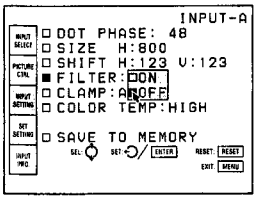


H adjusts the horizontal position of the picture.
V adjusts the vertical position of the picture.
As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left.
As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down.
Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

1) VESA is a registered trademark of Video Electronics Standard Association.

FILTER

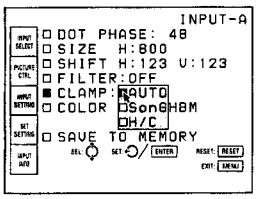
Corrects line patterns that appear on the picture input from INPUT A.



These lines occur when an RGB signal containing horizontal picture dots other than 640 is input. In such case, set to ON. The picture will lose some clarity, but the line patterns will be reduced. Set to OFF to set the dot number of the input signal to the LCD pixels number.

CLAMP

Corrects the luminance of the picture input from INPUT A.



CLAMP is used as a standard for setting the black level of a picture correctly. The standard position of the clamp depends on the kind of sync. signal being used. Normally, the projector CPU judges the signal and sets the position automatically. However, the CPU can misjudge the signal because of noise. If the luminance of the picture seems to be incorrect (too dark, the black color is too light, or the luminance is unstable) the clamp position may need to be changed.

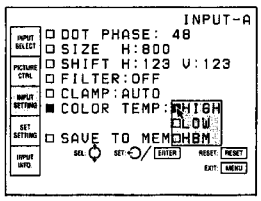
AUTO: Automatic setting mode. Normally set to this position.
SonG: Set to this position if the black seems too light or greenish.
H/C: Set to this position if the picture is too dark or luminance is unstable.

Note

If the luminance is still incorrect after changing the clamp setting, check the input signal and the connections.

COLOR TEMP

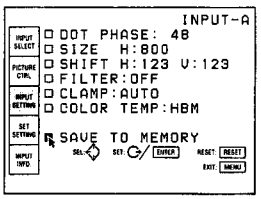
Adjusts the color temperature.



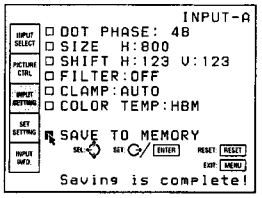
HIGH: Makes the white color bluish.
LOW: Makes the white color reddish.
HBM (high brightness mode): Reproduces a picture with high brightness.

SAVE TO MEMORY

You can save the settings in the INPUT SETTING menu in the projector memory. Whenever a new setting is saved, the previous settings are overwritten.



Once you have adjusted the settings, select SAVE TO MEMORY and press the ENTER or the ➧ key. When the settings have been saved, the message "Saving is complete!" appears.



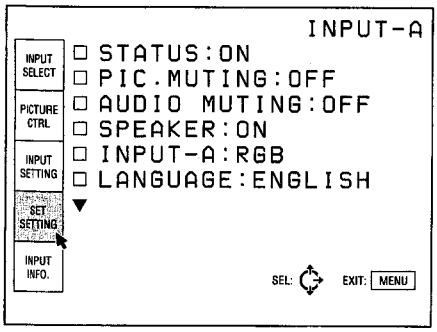
Items cannot be adjusted depending on the types of input signal

Item	Cannot be adjusted with
DOT PHASE	Signal input from VIDEO IN connectors
SIZE	Signal input from VIDEO IN connectors
FILTER	Signal input from VIDEO IN connectors, component input signal, 15k RGB signal
CLAMP	Signal input from VIDEO IN connectors, component input signal, 15k RGB signal
SHIFT	Signal input from VIDEO IN connectors

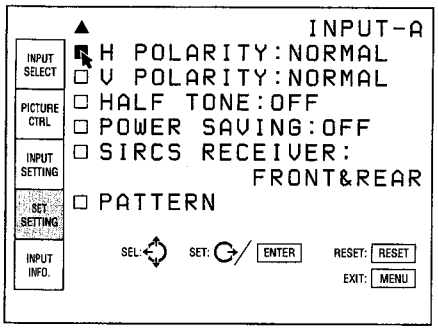
The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector. Items which can be adjusted are displayed in green.

<page 1>



<page 2>



The SET SETTING menu consists of two pages.
To change the page, press the ↓ or ↑ the key until the page changes when selecting an item.
On the Remote Commander, move the joy stick up or down until the page changes when selecting an item.

Operation

1. Select an item

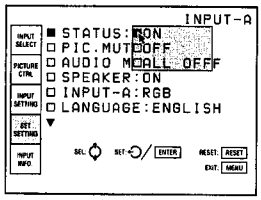
Use the ↑ or the ↓ key on the control panel to select the item, then press the → or the ENTER key.
On the Remote Commander, move the joy stick up or down to select the item, then move it to the right or press the ENTER key.

2. Change the setting

Press the ↑ or the ↓ key to change the setting.
On the Remote Commander, move the joy stick up or down to change the setting.
To restore the original screen, press the ENTER or the ← key.
On the Remote Commander, move the joy stick to the left.

STATUS (on-screen display)

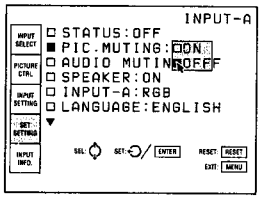
Sets up the on-screen display.



ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for "NO INPUT", "PIC/AUDIO MUTING", and warning messages.
ALL OFF: Turns off all of the on-screen displays except for warning messages.

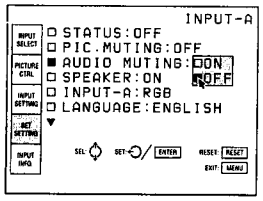
PIC. MUTING

Set to ON to cut off the picture.
When set to ON, "PIC MUTING" appears on the screen.



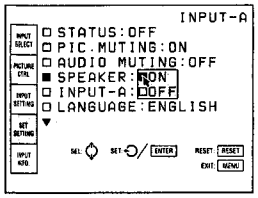
AUDIO MUTING

Set to ON to cut off the sound.
When set to ON. "AUDIO MUTING" appears on the screen.



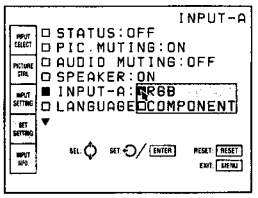
SPEAKER

Set to OFF to cut off the sound of the internal speakers. When set to OFF, "SPEAKER OFF" appears on the screen when you turn on the power.



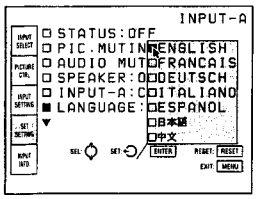
INPUT-A

Selects the RGB or COMPONENT signal input from INPUT A.



LANGUAGE

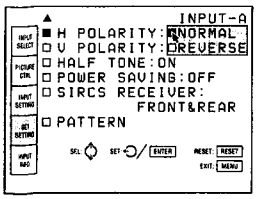
Selects the language used in the menu and on screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

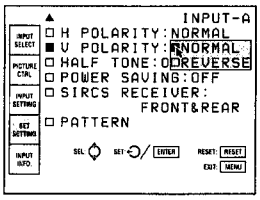
H (Horizontal) POLARITY

Set to REVERSE to reverse the horizontal orientation of the picture.



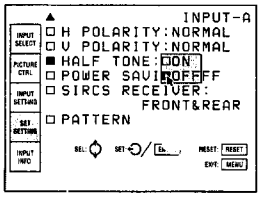
V (vertical) POLARITY

Set to REVERSE to reverse the vertical orientation of the picture.



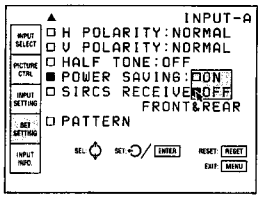
HALF TONE

Set to ON to reduce the luminance of the menu background.



POWER SAVING

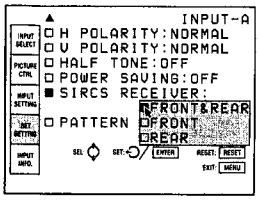
When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. The power saving mode is canceled when a signal is input or whenever a key is pressed.



(Continued)

SIRCS RECEIVER

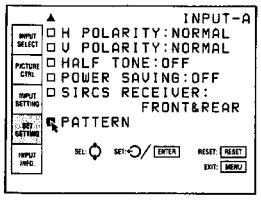
Selects the remote control detectors on the front and rear of the projector.



FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

PATTERN

Press the ➡ or the ENTER key to display the "H" test pattern. Press the ⬅ or the ENTER key to clear the pattern. The pattern disappears automatically if no key is pressed for one minute.

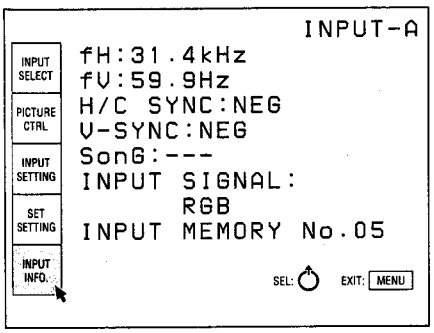


Item cannot be adjusted depending on the types of input signal

Item	Cannot be adjusted with
INPUT-A	Signal input from VIDEO IN connectors

The INPUT INFO Menu

The INPUT INFO menu displays the information on a current input signal.



fH (Horizontal frequency)

Indicates the horizontal frequency of the input signal. This indication is only used as a reference, this is not absolute value.

fV (Vertical frequency)

Indicates the vertical frequency of the input signal. This indication is only used as a reference, this is not absolute value.

H/C (Horizontal/Composite)-SYNC

Indicates the polarity of the horizontal or the composite sync. signal. When the picture is being projected using its sync signal, POS (NEG) is displayed in green. When the picture is being projected without using sync signal, POS (NEG) is displayed in white.

POS: The polarity of the sync. signal is positive.
NEG: The polarity of the sync. signal is negative.
---: No sync. signal is input.

V(Vertical) -SYNC

Indicates the polarity of the vertical sync. signal. When the picture is being projected using its sync signal, POS (NEG) is displayed in green. When the picture is being projected without using sync signal, POS (NEG) is displayed in white.

POS: The polarity of the sync. signal is positive.
NEG: The polarity of the sync. signal is negative.
---: No sync. signal is input.

SonG

Indicates the polarity of the Sync on Green. When the picture is being projected using its sync signal, NEG is displayed in green. When the picture is being projected without using sync signal, NEG is displayed in white.

NEG: The polarity of the sync. signal is negative.
---: No Sync. signal is input.

INPUT SIGNAL

Displays the type of current input signal.

NTSC 3.58: NTSC 3.58 input signal from VIDEO IN
NTSC 4.43: NTSC 4.43 input signal from VIDEO IN
PAL: PAL input signal from VIDEO IN
SECAM: SECAM input signal from VIDEO IN
PAL-M: PAL-M input signal form VIDEO IN
Y/C: S VIDEO input signal from VIDEO IN
RGB: RGB input signal
COMPONENT: Component input signal
B/W 50: Black and white input signal from VIDEO IN (vertical frequency: 50 Hz)
B/W 60: Black and white input signal from VIDEO IN (vertical frequency: 60 Hz)

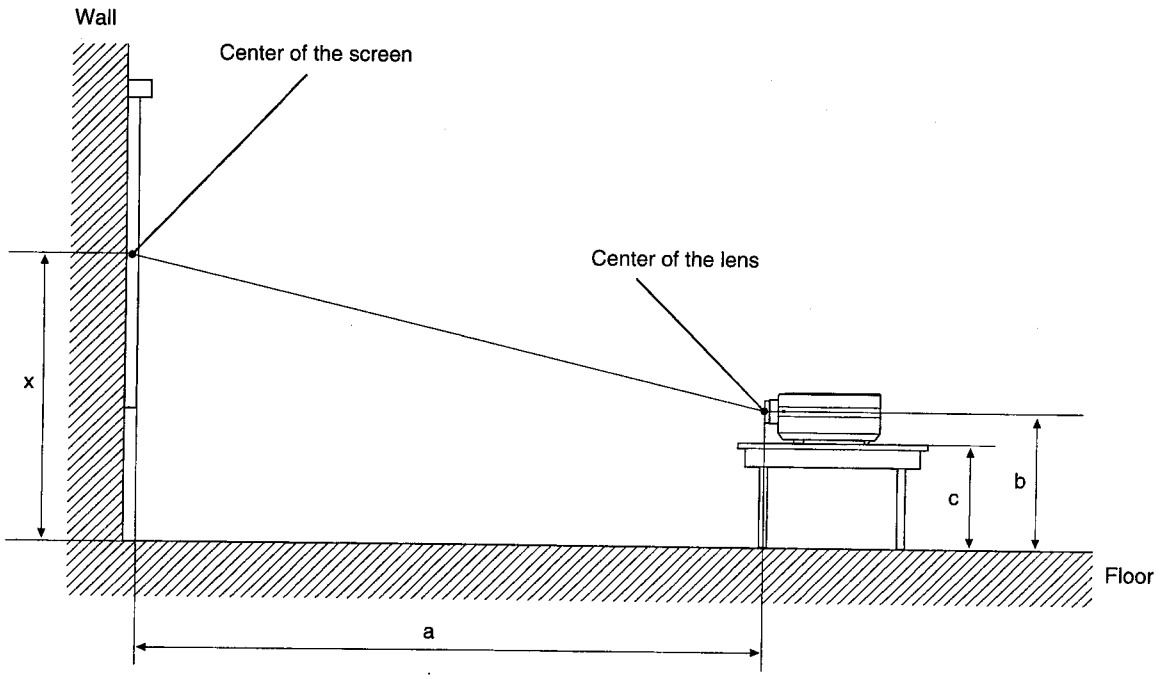
INPUT MEMORY No.

Indicates the memory number of the INPUT SETTING data used for current input signal.
Each preset signal is stored in following memory number.

Memory number	Preset signal
01	VIDEO (60 Hz)
02	VIDEO (50 Hz)
03	15k RGB/COMPONENT (60 Hz)
04	15k RGB/COMPONENT (50 Hz)
05	VGA MODE3 (GRAPHICS 640 × 480 dots)
06	VESA 72 Hz (640 × 480 dots)
07	Macintosh 13-inch separate sync (640 × 480 dots)
08	Macintosh 13-inch S on G (640 × 480 dots)
09	VGA MODE1 (640 × 350 dots)
10	VGA MODE2 (TEXT 640 × 400 dots)
13	S VGA VESA 56 Hz (800 × 600 dots)
14	S VGA VESA 60 Hz (800 × 600 dots)

Installation Examples

Floor Installation



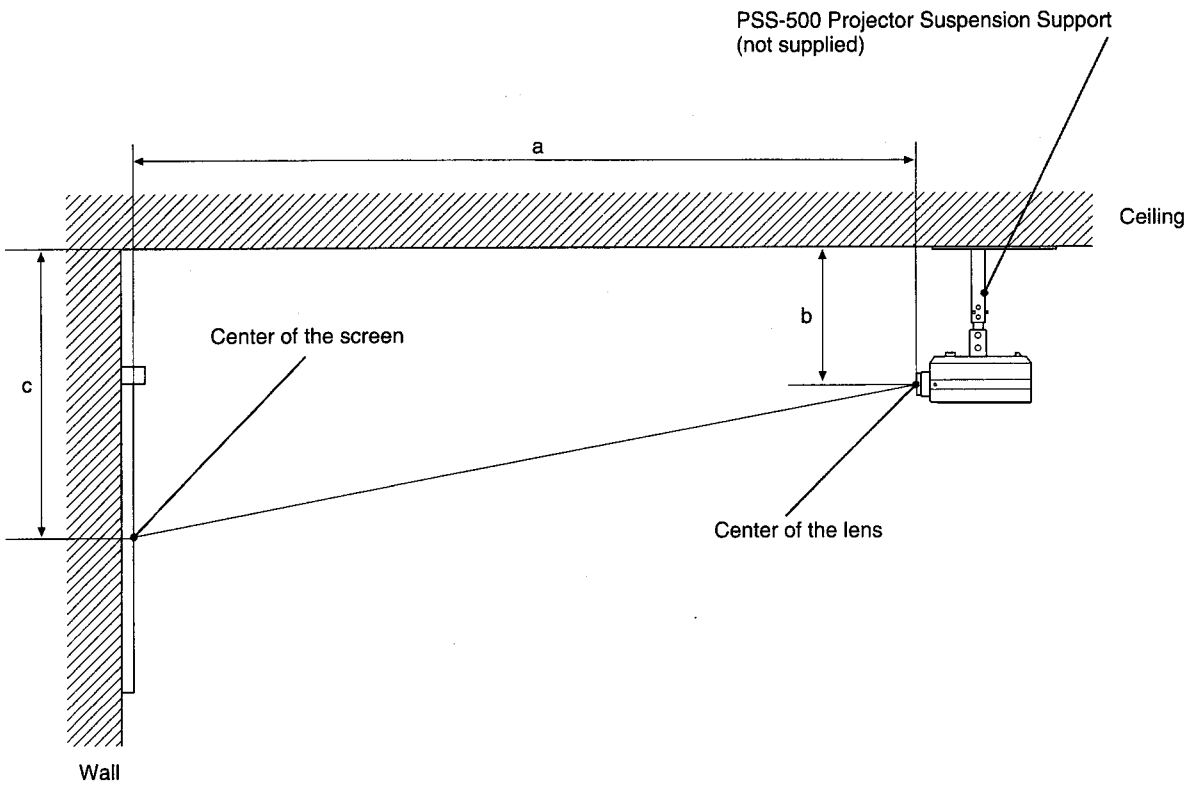
a: distance between the screen and the center of the lens
b: distance from the floor to the center of the lens
c: distance from the floor to the foot of the projector
x: free

Unit: mm (inches)

Screen size (inches)		40	60	80	100	120	150	180	200	250	300
a	Minimum	1490 (58 3/4)	2290 (90 1/4)	3090 (121 3/4)	3880 (152 7/8)	4680 (184 3/8)	5870 (231 1/8)	7070 (278 3/8)	7860 (309 1/2)	9860 (388 1/4)	11850 (466 5/8)
	Maximum	2290 (90 1/4)	3500 (137 7/8)	4710 (185 1/2)	5910 (232 3/4)	7120 (280 3/8)	8920 (351 1/4)	10730 (422 1/2)	11940 (470 1/8)	14950 (588 5/8)	17960 (707 1/8)
b		x–338 (13 3/8)	x–508 (20)	x–677 (26 3/4)	x–846 (33 3/8)	x–1015 (40)	x–1269 (50)	x–1523 (60)	x–1692 (66 5/8)	x–2115 (83 3/8)	x–2538 (100)
c		x–449 (17 3/4)	x–619 (24 3/8)	x–788 (31 1/8)	x–957 (37 3/4)	x–1126 (44 3/8)	x–1380 (54 3/8)	x–1634 (64 3/8)	x–1803 (71)	x–2226 (87 3/4)	x–2649 (104 3/8)

Ceiling Installation

For ceiling installation, consult with qualified Sony personnel.



a: Distance between the screen and the center of lens
b: Distance between the ceiling and the center of the lens
c: Distance between the ceiling and the center of the screen

Unit: mm (inches)

Screen size (inches)		80	100	120	150	180	200	250	300
a	Minimum	3090 (121 3/4)	3880 (152 7/8)	4680 (184 3/8)	5870 (231 1/8)	7070 (278 3/8)	7860 (309 1/2)	9860 (388 1/4)	11850 (466 5/8)
	Maximum	4710 (185 1/2)	5910 (232 3/4)	7120 (280 3/8)	8920 (351 1/4)	10730 (422 1/2)	11940 (470 1/8)	14950 (588 5/8)	17960 (707 1/8)
b		247/272/297/347/372/397 mm (9 3/4 / 10 3/4 / 11 3/4 / 13 3/4 / 14 3/4 / 15 3/4 inches) adjustable							
c		b+677 (26 3/4)	b+846 (33 3/8)	b+1015 (40)	b+1269 (50)	b+1523 (60)	b+1692 (66 5/8)	b+2115 (83 3/8)	b+2538 (100)

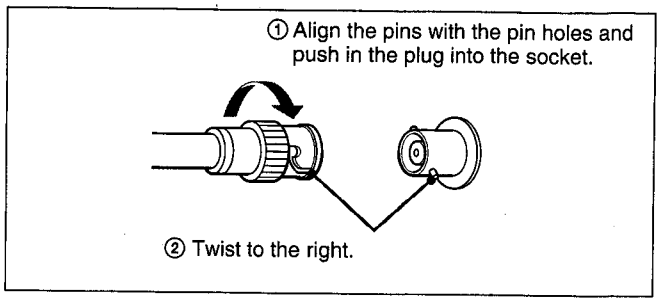
Connection Example

For details on how to conncet a computer, a VCR or external active speakers, see page 14. Also refer to the instruction manual of the equipment to be connected.

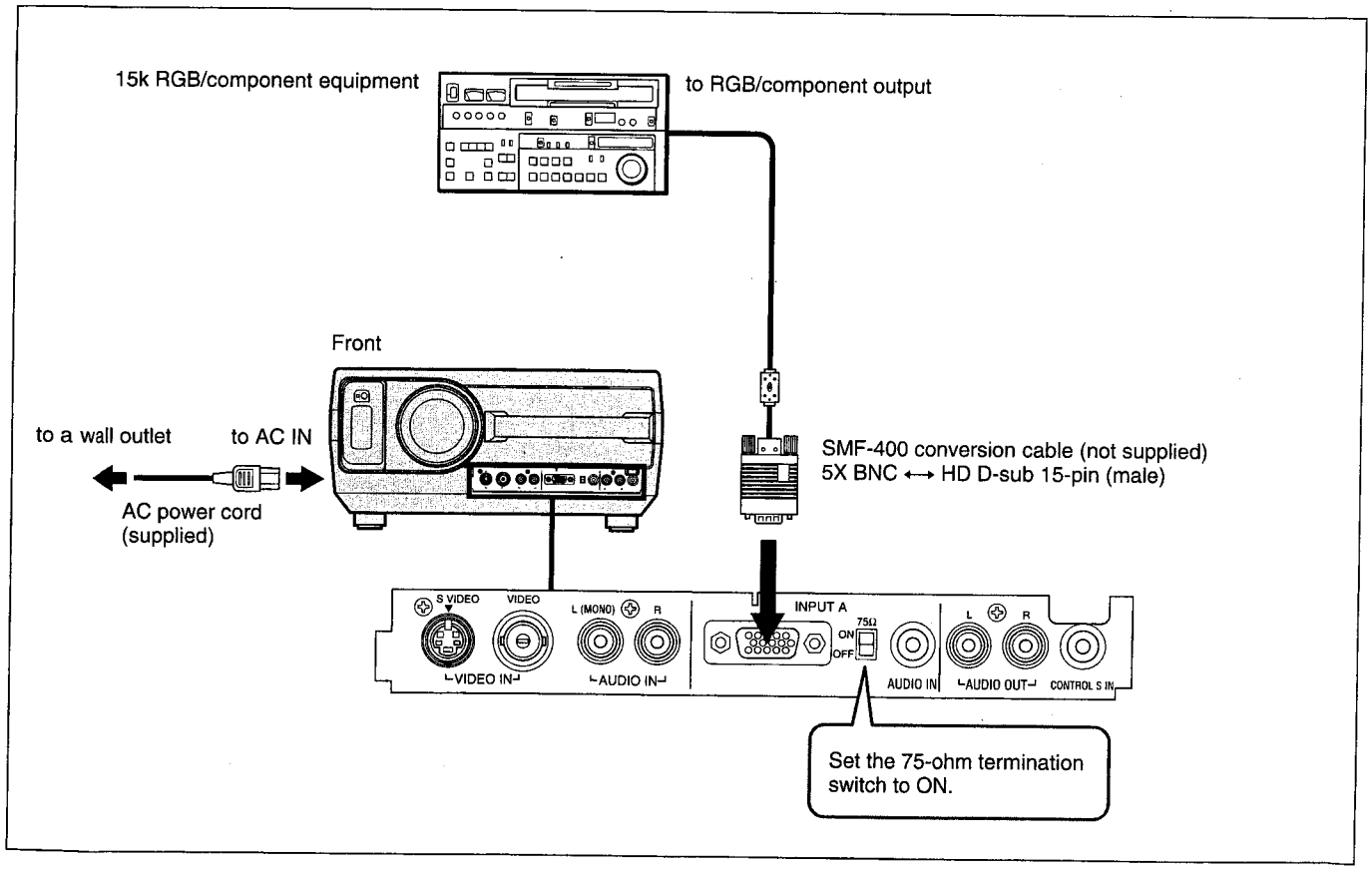
When making connections, be sure to:

- Before connecting any cables, make sure that each piece of equipment to be connected is turned off.
- Use cables appropriate for the equipment to be connected.
- A loose connection may cause hum or noise.
- When disconnecting a cable, pull it out from the plug; not the cable itself.

Connecting a BNC connector:



Connecting 15k RGB/Component Equipment



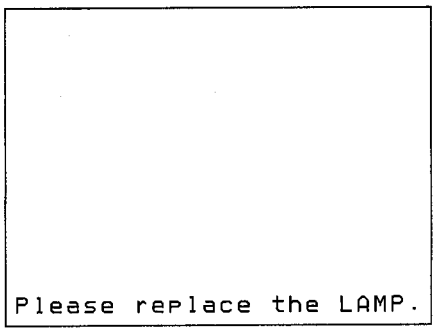
Notes

- This unit cannot accept separate sync signal with 15k RGB/component input signal. Use composite sync (negative) or Sync on Green.
- When inputting a frequency of VGA or an equivalent from an equipment such as scan-converter, use separate sync signal.
- This unit cannot accept a interlace signal of VGA or an equivalent other than 15k RGB/component signal.
- Select the RGB or COMPONENT signal with the INPUT-A item on the SET SETTING menu.

Maintenance

Replacing the Lamp

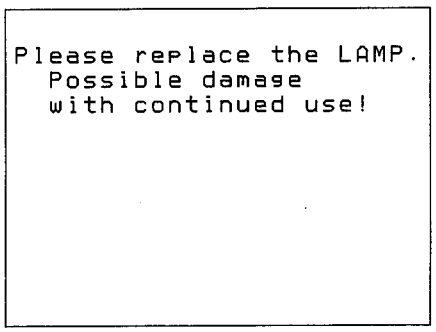
When it is time to replace the lamp, the message "Please replace the LAMP" appears on the screen when you turn on the projector. Once the message appears, replace the lamp promptly with a new PK-PJ500[1] lamp.



The message disappears if any key on the control panel or the Remote Commander is pressd.

Notes

- If you continue to use the projector after the message above has appeared, the following message appears.



When this message appears, no key except the POWER key will be operable.

- After turning off the power, wait at least one hour before changing the lamp to give it time to cool down completely.

For details on replacement, refer to the instruction manual of the lamp.

Note

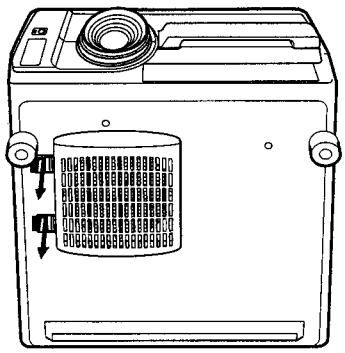
When the LAMP indicator lights up, never open the lamp cover if the projector is installed on the ceiling.

Cleaning the Air Filter

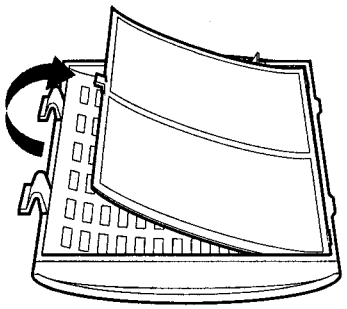
The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.
To clean the air filter, follow the steps below:

1 Turn off the MAIN POWER switch and unplug the power cord.

2 Remove the air filter cover on the bottom of the projector.



3 Remove the air filter.



4 Remove the dust from the filter with a vacuum cleaner.

5 Attach the air filter and replace the cover.

Notes

- If the air filter is excessively dirty, wash it with a mild detergent solution and dry it in a shaded place.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.

1) PK-PJ500 may not be available in some areas. For details, please consult your nearest Sony office.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem, using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power is not turned on.	The MAIN POWER switch is turned off.	Press the MAIN POWER switch at the rear of the projector (see page 16).
	The power has been turned off and on with the POWER key at a short internal.	Wait for about one minute before turning on the power with the POWER key.
	Lamp cover is detached.	Close the lamp cover securely (see page 31).
	Air filter cover is detached.	Close the air filter cover securely (see page 31).
No picture and no sound.	Cable is disconnected.	Check that the proper connections have been made (see pages 14 and 30).
	Input selection is incorrect.	Select the input source correctly.
No picture or no sound.	Either the picture or the sound is cut off.	Press the MUTING keys to release the muting function (see page 17).
The picture is noisy.	Noise may appear on the background depending on the combination of the numbers of dot input from INPUT A and numbers of pixel on the LCD panel.	Change the desktop pattern on the connected computer.
When inputting sound through INPUT A, sound comes through one channel only.	Monaural sound is being input through the INPUT A connectors.	Input stereo sound.
Picture from INPUT A is distored.	Setting for INPUT-A on the SET SETTING menu is inccorect.	Select RGB or COMPONENT for INPUT A on the SET SETTING menu according to the input signal.
On-screen displays do not appear.	STATUS in the SET SETTING menu has been set to OFF or ALL OFF.	Set STATUS in the SET SETTING menu to ON (see page 24).
Color balance is incorrect.	Picture has not been adjusted properly.	Adjust the picture (see pages 20 and 21).
	Projector is set to wrong color system.	Set the color system in the PICTURE CTRL menu to match the color system being input.
Picture is too dark.	Lamp is nearing the end of its life.	Change the lamp (see page 31).
	Contrast or brightness has not been adjusted properly.	Adjust the contrast or brightness properly.
Picture is not clear.	Picture is out of focus.	Adjust the focus (see page 17).
	Condensation has occurred on the lens.	Leave the projector for about two hours with the power on.
Picture luminance is incorrect.	The CLAMP setting is wrong.	Set it correctly in CLAMP in the INPUT SETTING menu (see page 23).
The LAMP indicator lights up.	A trouble has prevented the lamp from lighting.	Replace the lamp. If the projector is installed on the ceiling, consult with qualified Sony personnel.
The LAMP indicator flashes.	The lamp cover or the air filter cover is detached.	Attach the cover securely (see page 31).
The TEMP indicator lights up.	The internal temperature is unusually high.	Check to see that nothing is blocking the ventilation holes and leave the projector for about one hour (see page 10).
The Remote Commander does not work.	The Remote Commander batteries are dead.	Replace with new batteries (see page 12).
	The MOUSE/MENU switch has been switched to the MOUSE position.	Set the switch to MENU position.
	You are using the Remote Commander as a wireless Remote Commander, and it is connected to the projector.	Disconnect the cable.
	The unit is influenced of the fluorescent lamp.	Change the setting of SIRCS RECEIVER in the SET SETTING menu (see page 26).
Any key doesn't function other than the POWER key.	The lamp has reached the end of lits life.	Replace the lamp (see page 31).

Notes

- When the LAMP indicator lights up, **never open the lamp cover if the projector is installed on the ceiling.**
- If the lamp looks damaged when replacing, consult with qualified Sony personnel.
- If the lamp does not light even after replacing it with a new one, consult with qualified Sony personnel.
- If the TEMP indicator starts flashing, consult with qualified Sony personnel.

On-screen messages

Use the list below to check the meaning of the messages displayed on the screen.

Message	Meaning	Remedy
NO INPUT	No input signal	Check connections
Not applicable!	You have pressed the wrong key.	Press the appropriate key.
OPERATING TEMPERATURE TOO HIGH! This set will be shut down after 5 minutes	Operating temperature is too high.	Turn off the power. Check to see that nothing is blocking the ventilation holes.
Frequency is out of range! This input signal cannot be projected as the frequency is out of range!	This input signal cannot be projected as the frequency is out of the acceptable range of the projector.	Input a signal that is within the range of the frequency.
Please replace the LAMP.	The lamp has reached the end of lits life.	Replace the lamp.

Specifications

Optical characteristics

Projection system	3 LCD panels, 1 lens, projection system
LCD panel	1.3-inch TFT LCD panel, 921, 600 pixels (307, 200 pixels × 3)
Lens	1.6 times zoom lens f 50 to 80 mm/F 2.5 to 3.1
Lamp	250 W Metal halide lamp
Projection picture size	
	Range: 40 to 300 inches (diagonal measure)
Light output	ANSI lumen[1] 500 lm
Throwing distance	40-inch: 1490 to 2290 mm (58 3/4 to 90 1/4 inches) 80-inch: 3090 to 4710 mm (121 3/4 to 185 1/2 inches) 100-inch: 3880 to 5910 mm (152 7/8 to 232 3/4 inches) 120-inch: 4680 to 7120 mm (184 3/8 to 280 3/8 inches) 200-inch: 7860 to 11940 mm (309 1/2 to 470 1/8 inches) 300-inch: 11850 to 17960 mm (466 5/8 to 707 1/8 inches)

Electrical characteristics

Color system	NTSC/PAL/SECAM/NTSC4.43/ PAL-M system, switched automatically
Resolution	500 horizontal TV lines (VIDEO input) 640 × 480 pixels (RGB input)
Acceptable computer signals	
	15k RGB/component (NTSC) fH:15.734 kHz, fV:59.94 Hz 15k RGB/component (PAL/ SECAM) fH:15.625 kHz, fV: 50.0 Hz VGA MODE1 (640 × 350 dots) fH:31.468 kHz, fV:70.086 Hz VGA MODE2 (TEXT 640 × 400 dots) fH:31.468 kHz, fV:70.086 Hz VGA MODE3 (GRAPHICS 640 × 480 dots) fH:31.468 kHz, fV:59.94 Hz VGA VESA 72 Hz (640 × 480 dots) fH:37.86 kHz, fV:72.809 Hz Macintosh 13-inch mode (640 × 480 dots) fH:35.0 kHz, fV:66.66 Hz S VGA VESA 56 Hz (800 × 600 dots) fH:35.156 kHz, fV:56.25 Hz[2] S VGA VESA 60 Hz (800 × 600 dots) fH:37.879 kHz, fV:60.32 Hz[2]
Horizontal frequency range	
	RGB:15kHz (S on G/Composite Sync), 24 to 40 kHz
Speaker	Max. 2W + 2W, 7 × 4 cm (27 5/8 × 15 3/4 inches) stereo

Input/Output

VIDEO IN	VIDEO: BNC-type Composite video: 1 Vp-p ±2 dB sync negative, 75 ohms terminated S VIDEO: Mini DIN 4-pin type Y (luminance): 1 Vp-p ±2 dB sync negative, 75 ohms terminated C (chrominance):burst 0.286 Vp-p ±2 dB (NTSC), 75 ohms terminated burst 0.3 Vp-p ±2 dB (PAL), 75 ohms terminated
AUDIO IN	Phono type: 500 mVrms, stereo, impedance more than 47 kilohms
INPUT A	Analog RGB/component:HD D-sub15-pin (female) type *(For details, see "Pin assignment" on page 36.)* R/R-Y: 0.7 Vp-p ±2 dB positive, 75 ohms terminated G: 0.7 Vp-p ±2 dB positive, 75 ohms terminated G with sync/Y: 1 Vp-p ±2 dB sync negative, 75 ohms terminated B/B-Y: 0.7 Vp-p ±2 dB positive, 75 ohms terminated

1) ANSI lumen is a measuring method of American National Standard IT 7.215.
2) Compressed S VGA signal is reproduced.

SYNC/HD:
Composite sync: 0.6-8 Vp-p high impedance, sync positive/negative
Horizontal sync: 0.6-8 Vp-p high impedance, sync positive/negative
VD:
Vertical sync: 0.6-8 Vp-p high impedance, sync positive/negative
AUDIO IN: Stereo minijack
500 mVrms, impedance more than 47 kilohms
AUDIO OUT (variable out): Phono type
Max. 1 Vrms, when input is 500 mVrms, impedance less than 5 kilohms
CONTROL S IN/PLUG IN POWER: Stereo minijack
5 Vp-p,
Plug in power, DC 5 V maximum output 60 mA
Safety regulations VPL-V500Q: UL1950, CSA950, FCC Class B, IC Class B
VPL-V500QM: EN60 950 (TÜV), CE

General

Dimensions	368 × 176 × 420 mm (14 1/2 × 7 × 16 5/8 inches) (w/h/d)
Mass	Approx. 10 kg (22 lb 1 oz)
Power requirements	VPL-V500Q: AC 100 to 120 V/ 220 to 240 V, 50/60 Hz[1)]
	VPL-V500QM: AC 220 to 240 V, 50/60 Hz
Power consumption	Max. 350 W (Standby mode: 10W)
Heat dissipation	1194.4 BTU
Operating temperature	0°C to 40°C (32°F to 104°F)
Operating humidity	35% to 85% (no condensation)
Storage temperature	–20°C to 60°C (–4°F to 140°F)
Storage humidity	10% to 90%

Supplied Accessories
Remote Commander RM-PJM500 (1)
Mouse Receiver RM-PJ20 (Receiver × 1, conversion cable × 2, Operating Instructions × 1) (1)
Size AA (R6) batteries (2)
HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male) cable (1)
Signal Adapter (VGA ⟷ Macintosh) (1)
AC Power cord (1)
Lens cap (1)
Operating Instructions (1)

Design and specifications are subject to change without notice.

Optional accessories

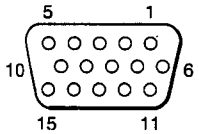
Projector Lamp PK-PJ500[2)] (for replacement)
Projector Suspension Support PSS-500
Signal Adapter ADP-10 (HD D-sub 15-pin ⟷ D-sub 9-pin (for SIC Cable))
Monitor cable
SMF-400 (HD D-sub 15-pin (male) ⟷ 5BNC)
SMF-401 (HD D-sub 15-pin (male) ⟷ HD D-sub 15-pin (male))
Projection Lens VPLL-FM100
Carring Case VLC-500
Screens
VPS-100FH (100-inch, flat)
VPS-120FH (120-inch, flat)

Some of the items may not be available in some areas. For details, please consult your nearest Sony office.

1) UL approved for 120V operation.
2) PK-PJ500 is not available in some areas. For details, please consult your nearest Sony office.

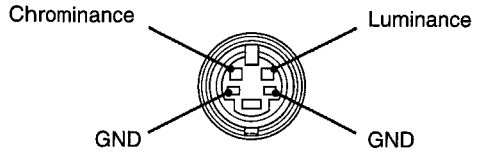
Pin assignment

RGB input connector (HD D-sub 15-pin, female)

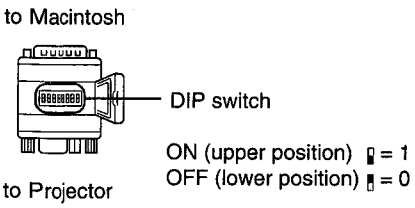


1	R/R-Y	9	N.C.
2	G/Y	10	GND
3	B/B-Y	11	GND
4	GND	12	N.C.
5	GND	13	HD/C.Sync
6	GND (R)	14	VD
7	GND (G)	15	N.C.
8	GND (B)		

S VIDEO connector (4 pin, mini-DIN)



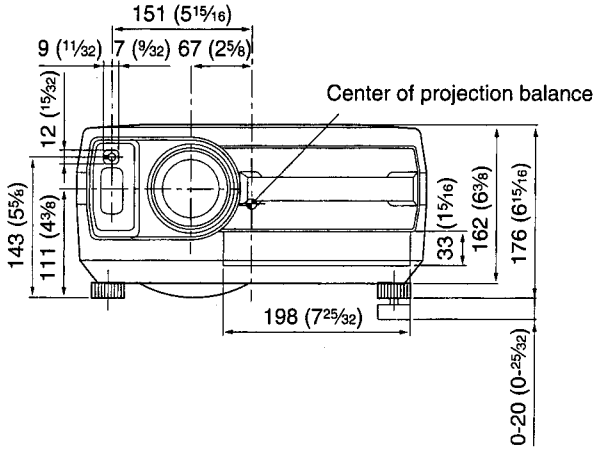
Switch position for adapter



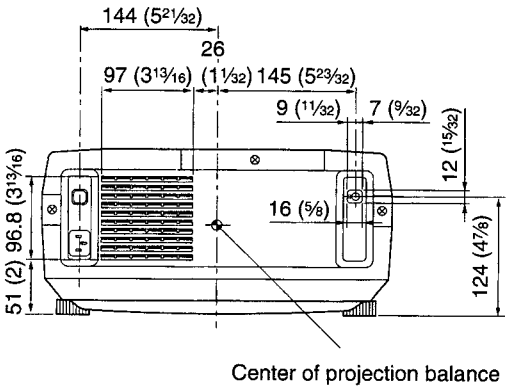
Mode	fH	DIP switch 12345678
VGA	31.5 kHz	00111001
Macintosh 13-inch	35.0 kHz	11001001

Dimensions

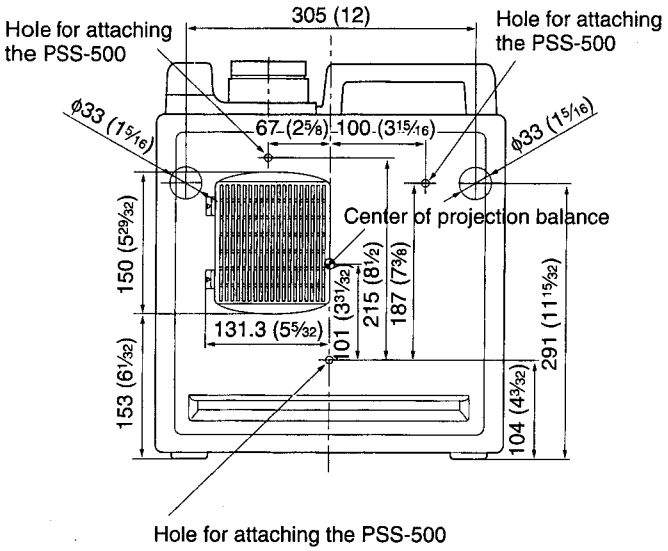
Front



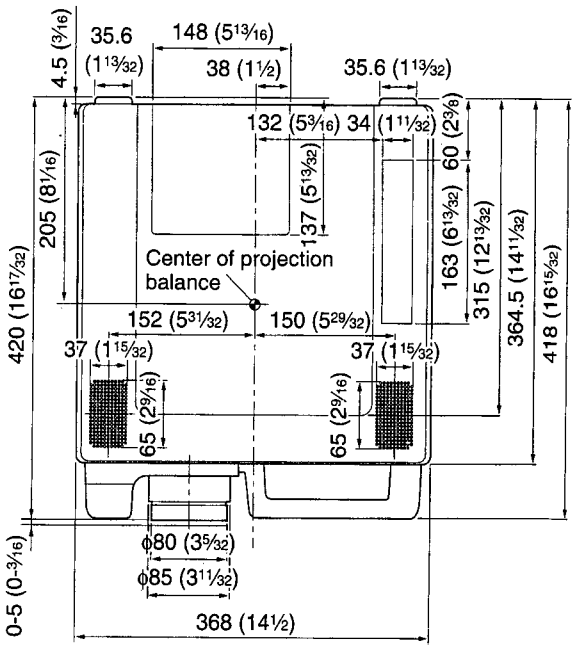
Rear



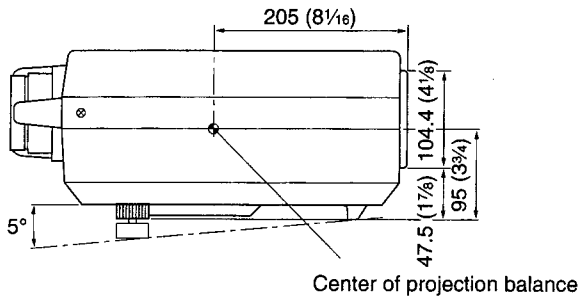
Bottom



Top



Side

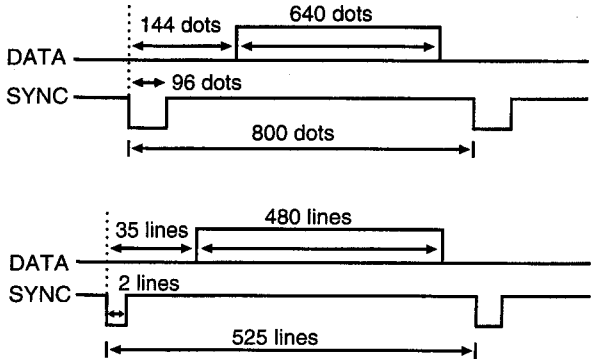


Unit: mm (inches)

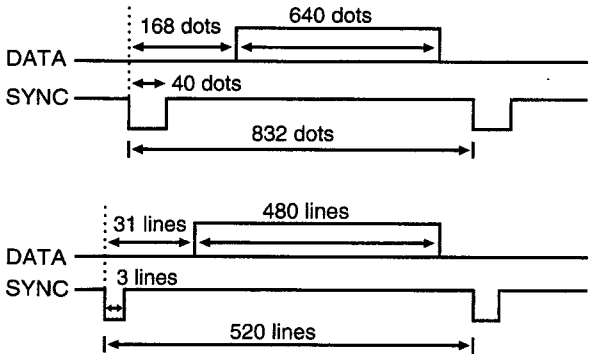
Initial setting signals

The projector has been set up to accept the following signal types.

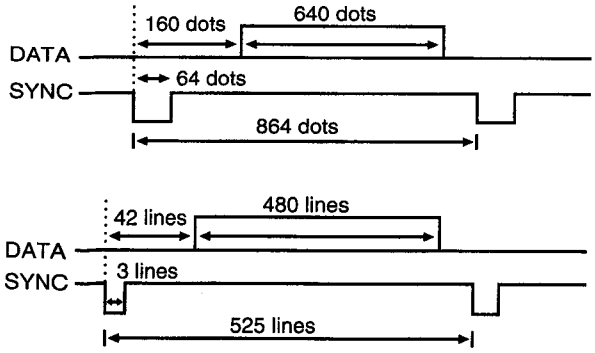
VGA MODE3 (GRAPHICS) (memory number 05)



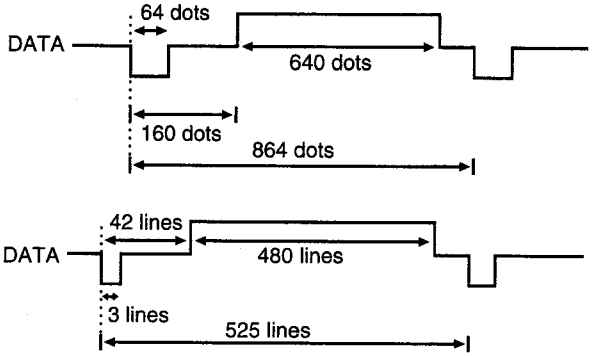
VESA 72 Hz standards (memory number 06)



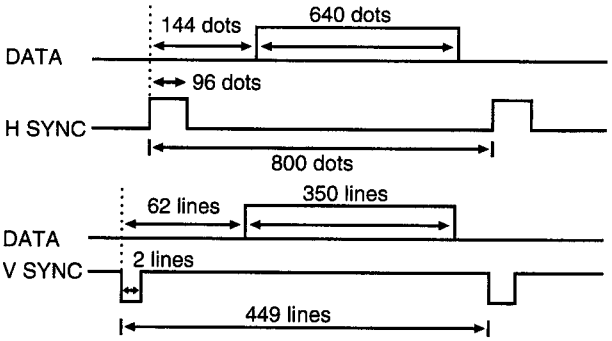
Macintosh 13-inch mode (separate sync) (memory number 07)



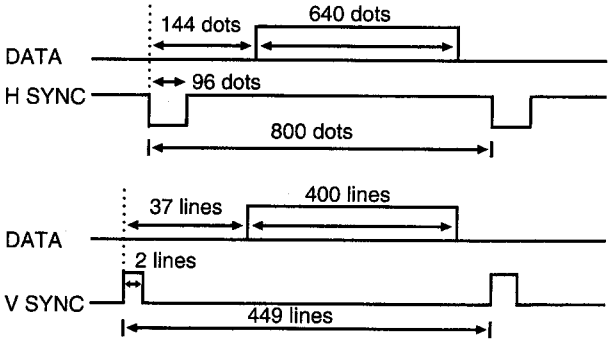
Macintosh 13-inch mode (S on G) (memory number 08)



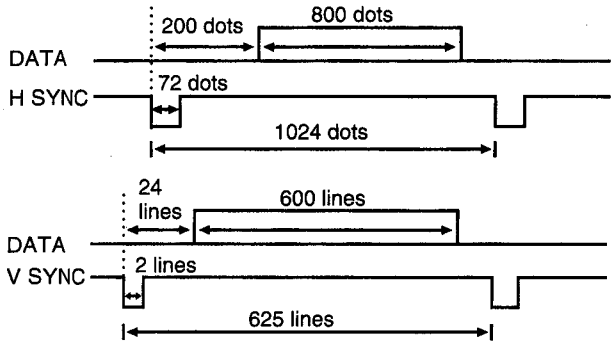
VGA MODE1 (memory number 09)



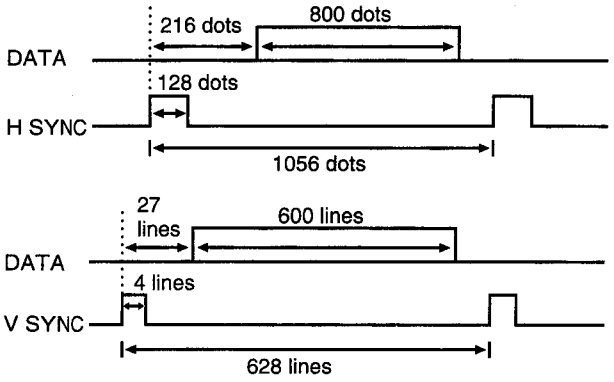
VGA MODE2 (TEXT) (memory number 10)



S VGA VESA 56 Hz (memory number 13)



S VGA VESA 60 Hz (memory number 14)



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